

**Amendments to the Claims:**

Following is a complete listing of the claims pending in the application, as amended:

**Listing of Claims:**

1. (Original) A method comprising:  
  
forming a lower cladding layer, said lower cladding layer having at least one waveguide support;  
  
forming a core material onto said waveguide support; and  
  
forming an upper cladding layer over said core material.
2. (Original) The method of Claim 1 wherein said upper cladding layer and said lower cladding layer surround said core material.
3. (Original) The method of Claim 1 wherein said core material is formed to be a substantially triangular shape.
4. (Original) The method of Claim 1 wherein said core material is deposited using a high density plasma chemical vapor deposition (HDPCVD) process.
5. (Original) The method of Claim 1 wherein said core material is an oxide.
6. (Original) The method of Claim 1 wherein said lower cladding layer is formed by:  
  
blanket depositing lower cladding material onto a substrate; and  
  
patterning and etching said lower cladding material to form said waveguide support.

7. (Original) The method of Claim 1 wherein said core material is formed to be a substantially semi-circular shape.

8. (Original) The method of Claim 1 wherein said core material is doped with a rare earth element.

9. (Original) The method of Claim 1 wherein said core material and said upper cladding layer is deposited *in situ* with each other.

10. (Original) The method of Claim 1 wherein said waveguide support has a width much less than a height.

11. (Original) A method comprising:  
forming a lower cladding layer, said lower cladding layer having at least one waveguide support;  
forming a core material onto said waveguide support using a high density plasma chemical vapor deposition (HDPCVD) process, wherein said core material is an oxide; and  
forming an upper cladding layer over said core material, wherein said upper cladding layer and said lower cladding layer surround said core material.

12. (Original) The method of Claim 11 wherein said lower cladding layer is formed by:  
blanket depositing lower cladding material onto a substrate; and  
patterning and etching said lower cladding material to form said waveguide support.

13. (Original) The method of Claim 11 wherein said core material is doped with a rare earth element.

14. (Original) The method of Claim 11 wherein said core material is formed to be a substantially triangular shape.

15. (Original) The method of Claim 11 wherein said core material is formed to be a substantially semi-circular shape.

16. (Original) The method of Claim 11 wherein said core material and said upper cladding layer is deposited *in situ* with each other.

Claims 17-19 (Canceled).